

16 February 1959

Memorandum for: CIA Librarian

Thru : Chief Reference Librarian
Subject : The revision of the ISC and its impact on book cataloging
Reference : Task team report no. 9, dated 26 March 1958.

1. The first draft of the revised edition of the ISC has now been completed in such form that the general outline of the system can be compared in structure and arrangement to that of the present edition. The organization of the present ISC is re-arranged in such a thorough-going way that, as a result, complete recataloging of the present book holdings of the CIA Library will be necessary if the revised ISC is chosen as the system of classification for books. Since complete recataloging must be thought of now, it seems wise to consider other systems of classification so that the best system for books can be selected.

2. The possible systems can be listed briefly: (1) the revised ISC, (2) the present ISC, (3) the Library of Congress system of classification and subject headings, (4) the 16th edition of the Dewey Decimal Classification and LC subject headings, (5) close classification by the old ISC, the revised ISC, LC, Dewey, or UDC, with no additional subject or area cataloging, and (6) no classification but intensive subject and area cataloging. Each of these systems will be considered in turn.

3. The revised ISC can best be thought of as a tidying-up of the present ISC. For example, joint military policy, operations, and history, including prisoners of war, are removed from the 100 section: World politics and government, and put into a military section; airplanes, which can be considered as (1) a commodity, (2) the subject of research and development in aeronautical engineering, (3) as part of an air transport company in being, (4) a weapon, and as (5) part of the state's military air forces, are no longer scattered in as many places but are consolidated. The variety of aspects from which the same plane can be viewed are now shown by a variety of action codes, i.e., subject subdivisions or modifiers such as (1) production figures, (2) research and development, etc. The revised ISC is a shorter, more compact, and more logical reworking of the ISC.

4. However, even more now than before, the ISC is an indexing code, similar in intent but not in form to any of the periodical indexes such as Readers' Guide. The material to be indexed is fragmentary, sometimes incomplete, always specific, usually discrete, and non-cumulative. Relations to or between one fact and other similar or dissimilar facts in the same document are shown by the addition of other subject codes, e.g., the subject of the chemical examination of the water in a mountain stream as a guide to the minerals to be found in the strata through which the stream runs, can not be coded as a unit. Each of the elements is considered as a separate fact, and the items are joined like beads on a string, in simple succession, rather than in a pattern, e.g., a code for Ores, metals, and minerals, plus a code for geological prospecting, plus a code for analytical chemistry, plus a code for rivers, plus etc., etc., rather

than ores, metals, and minerals--(Subdivision)Geological prospecting--(Sub-division)Chemical methods. The difference between the string and the pattern is enormous. Sometimes, indeed, the pattern of the relations is the important fact, rather than the so-called facts, e.g., agricultural taxes as a means of financing a five-year-plan in an underdeveloped area. Such subject relations can not be shown directly in the revised ISC--or in the present ISC.

5. Still unresolved in the revised ISC is the over-riding problem for book cataloging: how to put a multi-faceted book into one and only one place on the shelves near and/or adjacent to all other single- and multi-faceted books on the same subject or relation. Since books often include many subjects, either there is an arbitrary choice of one subject as the classification, or all the differences are subordinated to the likenesses and the book is put into the most general subject which encompasses the specifically dissimilar subjects. But, as a general rule, there is no provision for such "general" subjects in the revised ISC, because it is designed to pinpoint the specific subject subdivision. Furthermore, it should not be forgotten that documents about the same or similar subjects are never found adjacent to one another. Only the IBM cards with similar punched codes are grouped together. The grouping of similars in content is a problem peculiar to books.

6. Since books are "historical" by nature, subdivision of many subjects by historical period is necessary, e.g., Coal mining--Upper Silesia--1740-1939 should not be coded to appear with Coal mining--Upper Silesia--January 1959 production figures. Documents are usually concerned with the "here and now", so much so, as a matter of fact, that, when documents become "historical", i.e.,

five years old, the cards are retired to Records Center. A wide-ranging concept of time is of paramount importance for books, but it is un-necessary for documents.

7. Equally important for books is the concept of form. Documents take various forms, e.g., short despatches, long reports, but the form is never more important than the subject, nor is it ever codeterminous with it. For books it is necessary that there be provision for a form which also is a subject for such publications as the World Almanac or the Encyclopedia Britannica.

8. To make a book classification system out of the revised ISC, or even to restore those subjects removed from the present ISC, would require that the intent of the revision be changed, i.e., from revising the ISC so that it would be a better tool for indexing documents to revising the ISC so that it would be a better tool for classifying books. Form classification, i.e., yearbooks, periodicals, etc., are never used for documents; strict hierarchical subdivision and subordination are un-necessary for indexing documents, since both are replaced in fact by the adding of codes which are equal in value rather than lesser or greater in value, e.g., the value of 622.111, the third subdivision of 622.1, is equal to the value of 622.11, or to the value of 622.1 or 622. It is believed that the revised ISC could be re-worked so that it would be better for books. However, in proportion as it was modified for books, it would become less good for documents. Additions necessary for subjects for books would distort the structure and inflate the size of the system; these additions and changes would not aid the document indexers and might confuse them. Furthermore, even if the document indexers would accept all the necessary additions and changes, it would still be at least questionable if the other USIB agencies would approve these book-oriented changes and additions.

9. The same amount of time might more profitably be spent in a different revision of the ISC with the expressed purpose of making it a book system. The same overall rule for improving structural faults would be followed, i.e., a commodity would appear in one place only and the aspects of the commodity, i.e., production figures, use in the military services, etc., would be shown by subject modifiers. (A specific objection to the successful use of this device is the fact that, although the action codes are now punched for subjects, the action codes are ignored in the filing of the IBM cards.) More general subjects would be introduced, and an attempt would be made for the enforced use of hierarchical principles of subordination and subdivision. However, the revised ISC for books would, of necessity, be basically "a tidying-up of the present ISC." It would be a reworking of a system for indexing documents. The features necessary and/or desirable for books would be lifted from a book system and superimposed on or forced into the structure of the ISC. The result would be a bastard system.

10. The practices used for books and the practices used for documents are already divergent. In proportion to the amount of change in the ISC there would develop even greater divergence. No retrieval would be possible with the older "historical" documents in the superseded ISC system. Furthermore, there would be no interplay between books in the "book" ISC and documents in the revised ISC. As the number of intellofax runs for material in the old ISC declines, and the number will fall sharply as the amount of material in the revised ISC increases, the expense of wiring boards for punching and sorting book cards will quickly become prohibitive. At the moment, since adapting

boar a used for documents for book purposes is not expensive, an anomaly in the present system is not obvious: the present system is a machine system which is run partly by machine and partly by hand. Cards which are interfiled manually in the subject and area catalogs are first punched and pre-sorted by machine; if this work had to be done entirely by hand its cost would be astronomical.

II. As it is now used for book cataloging, the ISC is a classification system and a set of subject headings. IBM cards are used for all the catalogs, i.e., author-title catalog, subject-subdivided-by-area catalog, and area-subdivided-by-subject catalog, because it is simpler and cheaper to cut one multilith stencil for all the cards than to duplicate the same process to achieve 3'x5' cards which could be filed in only one of the three catalogs. Cards for the subject and area catalogs are punched and pre-sorted by machine, but are filed manually. The author-title catalog is entirely a manual catalog. If the ISC were considered only as a system of classification, the need for the machine procedures would disappear. 3'x5' cards, both IC printed cards and locally produced cards, could be used, as could word and phrase subject headings in alphabetic order—two things which would remove most of the user objections to the ISC. Some of the deficiencies of the ISC as a classification system could be compensated for by explicit subject cataloging. A separate area catalog, i.e., area-subdivided-by-subject, could be set up on the same alphabetic principles as the subject catalog.

There are several virtues in using the ISC as a classification system, but in abandoning it as a system of subject headings in a classed, numeric, machine-controlled order. The present book holdings would not need to be recataloged

at once, and the library as a whole would not be presented with two disparate book collections, two unrelated sets of catalogs, two sets of charge-out records, etc. The IBM cards in the present author-title catalog could be cut down to 3" in length and could be then interfiled with the 3"x5" cards. The ISC classification symbols on the 3x5 cards for the new books would lead library users to older books on the shelves in the same classification. Using the classification numbers as subject codes would enable the analysts to find materials in the IBM subject and area catalogs.

13. However, a book revision of the ISC will not result, *per se*, in the best classification system for books, since the ISC will be basically a system for indexing documents which has been altered to provide for books. As a private system, i.e., one peculiar to the books in the CIA Library, the ISC will grow more remote from the documents coded prior to the acceptance of the document revision of the ISC, and will have no connection either with documents coded under the new ISC or with any of the general systems of book classification, e.g., LC, Dewey. Some of the present book holdings would have to be recataloged, but it is hoped that only about 25% of the holdings would be involved. Shifting to the LC system of classification would entail the recataloging of 100% of the present book holdings, but other considerations can be brought to bear on the value of using the LC system of cards, classification, and subject-headings.

14. The LC system was designed to classify the largest book collection in the U.S., and it has been adopted by a number of other large libraries, not only because of its capacity for expansion, but also because these libraries can save money by copying the LC classification as given on LC cards. It is a system specifically designed for books, but, because of its size, can accommodate subjects often thought of as document subjects. It is the system best

known to research librarians and is the system favored by most of the CIA reference librarians. Revision of the classification tables and of the subject heading list is continuous, but no wholesale recataloging is ever required as a result of a revision.

15. The disadvantages of the LC classification system are (1) a base of the 26 letters of the alphabet which scatters books in as many places rather than into the 10 of Dewey or the 9 of the ISC; (2) certain sections would have to be reworked to provide for more intensive analysis, e.g., resistance, contemporary political affairs; (3) other sections will have to be enlarged to provide for more extensive coverage, e.g., intelligence, security, communism; (4) LC cards can not be used without some changes for CIA Slavic--and other language--holdings because of the different systems of transliteration; (5) changes in the LC classification schemes and/or subject headings for local preference, unless sharply controlled, can nullify the advantages of buying LC cards; (6) the area concept will be largely lost in the classification symbols since, aside from history, the LC system is a subject system and provision can not always be made to show the geographic area which is the originator of the product. For example, in the LC system of classification, the class number for Sugar manufacturing is TP 379; the areas of the Ukraine and the U.S. can be distinguished only by the third line of the call number where the difference is between .U3 and .U5. This area deficiency can be compensated for somewhat by altering the LC system of subject headings to provide for an area-subdivided-by-subject catalog, but the system, per se, will militate against any easy grouping of books by area.

16. The only well-known book system which provides the capability for area subdivision of every subject is the Dewey Decimal Classification (and its off-

spring, the UDC). Furthermore, it is possible to use the area not only as a subdivision of the subject but also independently in the manner of the ISC-AMS area concept, e.g., the number for Sugar manufacture and refining is 664.1; the number for the Ukraine is 947.71. The numbers can be combined as 664.14771, or separated as 664.1 (947.71), or as area subdivided by subject 947.71--664.1, or by subject alone without regard to area 664.1. Since the books can be shelved in any of the four ways, maximum flexibility is provided. In the LC system of classification the symbol is TP 379 .03 (for Ukraine) as distinguished from TP 379 .05 (for United States). The books can be shelved only in this one way. The subject headings for both systems are the same, Sugar--Manufacture and refining--Ukraine, and/or by local practice, Ukraine--Sugar--Manufacture and refining.

17. The Dewey Decimal Classification has very recently achieved a 16th edition, and it presents a thoroughly up-to-date system. Any changes and revisions in it should not involve major recataloging, and if taken care of currently can be handled quickly and easily. Furthermore, DC numbers have been given on many LC cards since 1930, and the 16th edition will be used for books published since 8 December 1959. The system is completely compatible with the use of LC subject headings and LC printed cards.

18. Studies of the use of some subject catalogs, e.g., California and Ale, have led to the formulation of a question: Is the use of subject catalogs sufficiently great to justify the cost of the elaborate paraphernalia involved? On the basis of the inconclusive studies, the answer may be no. One rough-and-ready answer is to abandon subject catalogs and rely solely on close classification, e.g., the classification of 664.14771 as above. In order to provide

for those cases in which the books would be missing from their places on the shelves, free use is made of the shelf-list. The greatest objection to this procedure is that subsidiary and ancillary subjects often can not be included in the classification. Another objection is that the classification may too often be carried to absurd lengths.

19. Because the preceding method does involve the use of a shelf-list, in effect a subject catalog is provided. If the books were not classified, but subject cataloging were done, theoretically not only any book on a subject but all books related to the subject would come to the notice of the analyst as he used the catalog. If an area catalog were also provided, he would theoretically achieve almost 100% retrievability. The cataloging cost would be reduced because no classification would be required; shelving cost would be reduced since new titles and copies would be filed in accession list order or by size, etc. (cf. the practice in the New York Public Library) and no reshelfing would be necessary to accommodate expansion of one section of a classification scheme. The shelving arrangement of books in special collections would be at the discretion of the curators (cf. the practices of the NIC and Reference collections). However, the cost of classification is simply transferred from the Catalog Section to other sections of the Library, and consistency and uniformity of arrangement are replaced by specialized practices. Above all, browsing becomes impossible.

20. I think that the best system which the CIA Library could choose for books is a system which incorporates the following: (1) a wholly manual system; (2) 3x5 cards; (3) a subject catalog using word and phrase alphabetic subject headings; (4) an area-subdivided-by-subject catalog; (5) a classification

system based on a combination of area and subject. I would like to use LC printed cards when these are available, and, above all, I would like to like to use LC subject headings. However, I would like to use the Dewey Decimal Classification rather than the LC system of classification because it is less elaborate, scatters materials less (i.e., in 10 large divisions rather than the possible 26 of the Library of Congress system), can provide for several area approaches, and is easily learned by the users, most of whom used it in school, public, and college libraries. (It must be pointed out that the easiest system for the catalogers is the LC system because of its elaborate comprehensiveness.) However, a shift to either LC or Dewey would be total and complete, and the CIA library would be saddled for some time with books in 2 absolutely different systems which would result in 2 sets of books shelved differently, 2 sets of unrelated subject and area catalogs, 2 sets of charge-out records, etc.

21. The immediate advantage lies in using the ISC as the system of classification, using 3x5 cards and LC subject headings, and abandoning the machine aspects of the IBM system. The greatest possible unity of the collections would thus be preserved. However, this system would not be the best possible system. Sometime in the future there will develop a need which could best be handled by a purely book system of classification, and it is expected that the desire to have the same system as the one used in the LC and in the Department of State Library will grow more insistent. At that time, if the change-over from IBM cards to 3x5 cards has been completed, re-classification will be easier than at present. But this is simply putting off until tomorrow what could be done today. If the LC system of classification, as well as LC cards

and LC subject headings, will remain the ideal some will always want, I suggest that we adopt all the features of the LC system lock, stock, and barrel, now.

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